CUBIT Capability Proposal

Technical Area Technical Lead

Geometry, Meshing, Infrastructure, GUI, Graphics, etc	Cubit Developer in charge of technical area
Upgrade Meshing Powertool	

MRD Description

Describe the capability in terms of how a user would see it.

Make the Powertool more useful in recognizing meshable volumes, showing the user which volumes need further work, and suggesting possible ways to help

SRS Description

What needs to be done by Cubit developers to implement this capability? Break the tasks into steps if applicable. (Steps should be on the order of 2 man-weeks or more)

- 1. Make Autoscheme more reliable with current schemes
- 2. Make Autoscheme recognize more volumes, and use more algorithms
- 3. Make GUI guide the user to what must be done, not just which volumes need work but which surfaces, intervals, etc., are preventing meshing

Justification

Describe why this is important and what impact it will have if it is implemented. (or not implemented).

Time to mesh is what we are after, autoscheme and geometry are probably the areas we can make the most improvement.

Resources	Time estimate	Targeted Release
Who will work on this	How much time will it take in man-	10.2 (August 06), 10.3 (March 2007), 10.4
	weeks	(August 2007), Future (beyond FY07)
Randy (GUI)	4	10.2
Clint (graphics)	2	
??? (autoscheme)	28 (risky to predict)	

Submitted By:	Date:
Ray	27 March, 2006